

PHILIP MORRIS U. S. A.

INTER - OFFICE CORRESPONDENCE

Richmond, Virginia

To: . Mr. Richard A. Thesing
From: . Garland V. Carter
Subject: . Accomplishments for 1989

Date: January 17, 1990

I. SPECIAL INVESTIGATIONS AND METHODS DEVELOPMENT

A. Citrate in Papers by Ion Chromatography

Objective: To develop an ion chromatographic procedure for separating and quantifying citric acid extracted from cigarette papers.

Results: The procedure was verified using our ion chromatograph for testing papers from CI brands. The results agree with the gas chromatographic method, an ion chromatographic method was edited for CTSD's use and submitted to Methods Committee. The procedure was passed on to the Analytical Chemistry Section.

B. Dynamic RTD/Ventilation

Objective: To evaluate a novel instrument to determine its capabilities for monitoring RTD and ventilation changes as cigarettes are puffed.

Status: An evaluation of the instrument indicates it provides reproducible results on a per-puff basis for dynamic RTD and ventilation. The instrument is ready for investigations of these parameters in different filter types to aid Filter Development with design/performance characteristics.

C. Industry Monitor #13

Objective: To stage the fabricated monitor for conditioning and canning.

Status: With the help of Building Administration, racks for staging the monitor in a conditioned laboratory were fabricated. The racks provided the vertical space so that the cigarettes could be stacked for conditioning. I also helped during the canning of the monitor.

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II. ROUTINE ANALYSES

A. Glycyrrhizic Acid

Glycyrrhizic acid was quantified in samples to support the following projects: Marlboro Standardization, ART, Natural, Famous (PMI) and Bonded Ends. Samples were also quantified from Bright Casing studies at Stockton Street, Dryer Studies and in block licorice from Manufacturing.

B. Filter Flare-up

Filter flare-up testing was performed on all new brands introduced during 1989. Incidences of flare-up were noted for competitors brands and investigated for Philip Morris brands.

III. PUBLICATIONS, MEMOS, PRESENTATIONS

1. Project Meeting: Citric Acid by Ion Chromatography, March 28.
2. Project Meeting: Five-Port Dynamic RTD/Ventilation Instrument, December 7.
3. Memo to Mr. J. E. Wickham, "Flare-up Potential of New Brands for 1988 - First Quarter, 1989," dated May 11, 1989.

IV. CAREER DEVELOPMENT

1. Attended the North American Smoking Machine Users Group meeting sponsored by Fidus Instrument Corp. on October 2.
2. Attended "Technical Report Writing," by Dr. A. Eisenberg, November 15-16.

GVC:rad

Barclay V. Carter

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